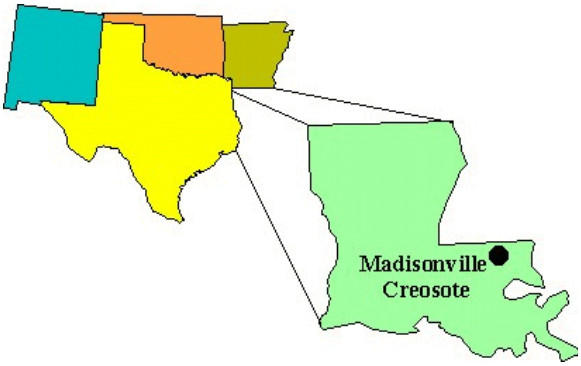
MADISONVILLE CREOSOTE WORKS
ST. Tammany Parish, Louisiana

EPA Region 6
EPA ID# LAD981522998
State Congressional District: 1
Fact Sheet Updated: March 2004



SITE DESCRIPTION

Location: The Madisonville Creosote Works (MCW) Site consists of a defunct creosote wood treating facility and covers about 29 acres in Section 42, Township 7S, Range 10E, St. Tammany Parish, in southeastern Louisiana. It is adjacent to the southern side of Louisiana State Highway 22, about 3 miles west of downtown Madisonville and 1.25 miles from the Madisonville city limits. The approximate geographical center of the Site is at 30°25'38" north latitude and 90°11'55" west longitude as measured from the United States Geological Survey (USGS) 7.5-minute series topographic quadrangle for Madisonville, Louisiana. The address of the property is 1421 West Highway 22, Madisonville, Louisiana 70447.

Population: 500 residents within 1 mile radius

Setting: The area surrounding the MCW Site is predominantly rural and wooded with four residences immediately adjacent to the defunct facility area. There are two unnamed streams leading away from the facility, one to the north and the other to the south.

PRESENT STATUS AND ISSUES

- The MCW Site is in Operation & Maintenance (O&M) under the oversight of Louisiana Department of Environmental Quality (LDEQ). O&M consists of ground water monitoring and operation of the subsurface recovery trench system to ensure protectiveness of the EPA cleanup actions.

- The EPA, LDEQ, and St. Tammany Parish are working together to explore recreational reuse scenarios for the property in the future.

- The EPA completed the first Five Year Review on March 1, 2004. A copy will be placed in the Site Repository in the Madisonville City Hall in Louisiana. At this time, based on the information available during the first five-year review, the selected remedy appears to be performing as intended. The selected remedy currently protects human health and the environment based on results from treated waste sampling and shallow groundwater sampling. However, for the remedy to be protective in the long term, the pump vaults,

pumps, and wastewater treatment plant need to be maintained, ground water monitoring data need to be collected and evaluated on a routine basis to ensure contamination of the ground water is not occurring, and the security fencing needs to be maintained. Issues identified in the Five-Year Review are as follows:

Issue	Recommendations and Follow-up Actions
Minimal amounts of DNAPL collected	Identify the reason for the diminished amount of DNAPL collected and determine whether corrective measures are necessary
Lack of ground water sampling	Initiate the ground water monitoring program as outlined in the O&M manual
Electrical identification	Identify the wiring variance from the existing O&M manual, one-line diagrams and make corrections, if necessary
Overgrowth of vegetation	Manually mow the perimeter of the site, while avoiding cutting down the trees planted along the perimeter fencing

The recommendations and follow-up actions should be implemented within one year of Five-Year Review signature. The fist two issues identified may affect long-term protectiveness of the remedy.

WASTES AND VOLUMES

The principal pollutants at the site include polynuclear aromatic hydrocarbons (creosote compounds).

- Source Process Area: A total of 371 tons of creosote sludge, and 9,512 gallons of creosote sludge and liquid have been removed. Facility structures dismantled.

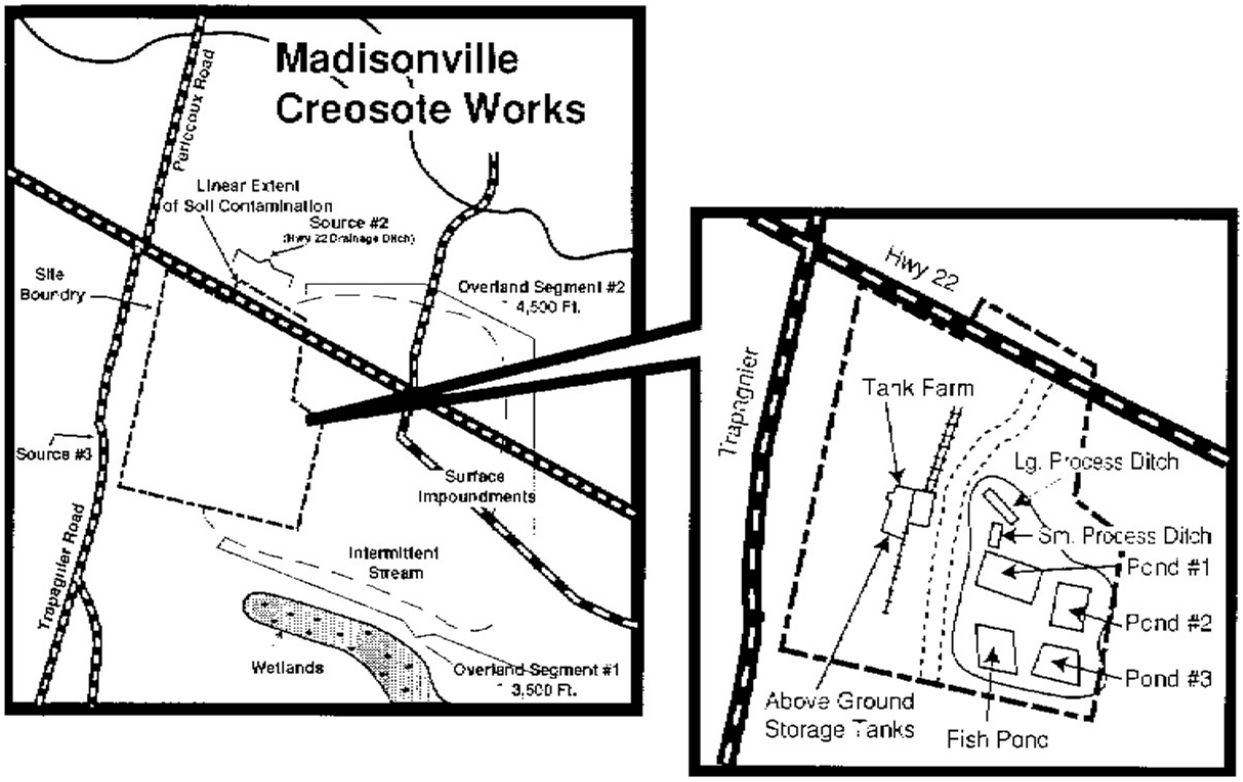
- Sitewide Soil/Sediment: A total of 131,000 tons of contaminated soil and sediment from all facility areas and runoff streams have been excavated, thermally treated, and placed back on-site.

- Ground water: Dense non-aqueous phase liquids (DNAPL) recovery trench system installed underneath previous site process and lagoon facilities. Estimated 12,000 gallons of creosote has been recovered as of when operations were turned over to LDEQ.

NATIONAL PRIORITIES LIST

NPL Inclusion Proposal Date: June 17, 1996
NPL Inclusion Final Date: December 23, 1996
NPL Deletion Proposal Date: n/a
NPL Deletion Final Date: n/a

SITE MAP



SITE HISTORY

- 1956-1994: Wood treater facility treated timbers with creosote from 1956 to 1994. On July 22, 1994, the LDEQ referred the MCW Site to EPA.

- Jan. 10, 1996: After unresolved negotiations with the MCW Site, the EPA Compliance Assurance and Enforcement Division transferred action lead to the EPA Superfund Division.

- Mar. 14, 1996: Residential water sampling was conducted around the immediate perimeter of MCW. Private wells screened within Shallow Aquifer (a domestic water supply source for some residents in the area, located at a depth of approximately 80 to 200 feet below ground surface) were sampled. No creosote constituents were found in the drinking water.

- Mar. 26, 1996: EPA initiated the Remedial Investigation (RI) for the MCW Site. The goal of the RI is to determine the nature and extent of the contamination related to the MCW Site. Field activities and data collected between May 1996-Aug 1997 were conducted to support the RI.

- Jun. 17, 1996: EPA Region 6 proposes to EPA Headquarters for inclusion of the MCW Site on the National Priorities List (NPL).

- Sep. 10, 1996: An open house was conducted to share information with the community on activities relating to the MCW Site.

- Sep. 23, 1996-Jan 9, 1997: EPA mobilized the U.S. Corps of Engineers to begin a removal action involving the process area on the MCW Site. Removed waste associated with the former process area include: 371 tons of creosote sludge, 1,512 gallons of creosote sludge, 8,000 gallons of creosote liquid, and 926 tons of contaminated concrete, piping/metal, and woodchips.

- Nov. 12, 1996: EPA ecological evaluation report was completed by the EPA Environmental Response Team. The physical, chemical, and biological characteristics of the stream system which drains the MCW Site were studied and assessed based on field activities conducted in June and September 1996.

- Dec. 23, 1996: EPA announced the finalization of the MCW Site to the NPL. The Site is now eligible to utilize the Superfund trust fund monies for remedial cleanup.

- Jan. 17, 1997: EPA initiated work on the Feasibility Study (FS) for MCW. The FS evaluates the data collected for the RI and searches for cleanup solutions based upon evaluation of all remedial alternatives.

- Feb. 6, 1997: An open house was conducted to share information with the community on activities relating to the MCW Site.

- Mar. 27, 1997: EPA Human Health Risk Assessment and Ecological Screening Risk Assessment was completed.

- Aug. 1997, the Community Relations Plan was completed for the MCW Site. This plan was developed with information gathered from community open houses and interviews with local residents and their representatives.

- Sep. 26, 1997: EPA RI Report for all on-site areas was completed for the MCW Site.

- Oct. 24, 1997: EPA RI Supplemental Sampling Report for all off-site areas was completed for the MCW Site.

- Nov. 18, 1997: EPA FS Report was completed for the MCW Site.

- Mar. 28, 1998: An open house was conducted to share information with the community on activities relating to the MCW Site.

- Mar. 26, 1998: EPA Proposed Plan community meeting was held to present EPA's recommended course of action.

- Aug. 25, 1998: EPA Record of Decision (ROD) was issued for the MCW Site.

- Jan. 1999: Field mobilization began to initiate the Remedial Action (RA) which is the implementation stage of the cleanup remedy as selected in the ROD.

- Feb. 11, 1999: An open house was conducted to share information with the community on activities relating to the MCW Site.

- Mar. 1, 1999: A community bulletin provided the public with information about the MCW Site and the questions and answers session from the February 1999 open house.

- Apr. 20, 2000: A pre-final inspection was completed by both LDEQ and EPA for the MCW Site.

- May 31, 2000: A final inspection certifying that all cleanup activities associated with LTTD operations and DNAPL recovery trench construction was completed

- Jul. 27, 2000: An official construction completion ceremony was held to commemorate the completion of MCW Site cleanup activities.

- Jul. 2000-August 2001: EPA maintained ground water monitoring and operation of the underground recovery trench system for one year. Ground water monitoring shows that the underground recovery trench system is successfully operating and that no contamination exists in usable ground water..

- Sep. 1, 2001: LDEQ takes over maintenance duties of the MCW Site. O&M officially begins.

- Sep. 24, 2001: EPA completes Final Remedial Action Report for MCW Site.

- Sep. 2003: The first Five-Year Review was initiated.

- Oct. 2003: Activities to involve the community in the Five-Year Review were initiated with a public notice published in the regional daily newspaper, The News Banner, located in Covington, Louisiana. This notice was to inform the public that a five-year review was to be conducted and that the results of the review would be made available to the public at the site's information repository. A Site Inspection was conducted on October 9, 2003, to assess the condition of the site and the measures employed to protect human health and the environment from contaminants still present at the site.

ENFORCEMENT HISTORY

1996: Notice letters for removal action issued to identified potentially responsible parties.

1996: Waiver of special notice for remedial investigation/feasibility study activities issued to identified potentially responsible parties.

HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

To ensure a protective level of residential/recreational usage for the MCW Site, EPA has selected a numerical cleanup goal of 3 mg/kg benzo(a)pyrene (BAP) equivalents (a major creosote PAH constituent). No significant ecological risks were found at the Site.

More information can be found in:

Mar. 27, 1997: Human Health Risk Assessment and Ecological Screening Risk Assessment.
Sep. 26, 1997: Remedial Investigation Report (on-site areas).
Oct. 24, 1997: Remedial Investigation Supplemental Sampling Report (off-site areas).
Nov. 18, 1997: Feasibility Study Report.
Aug. 25, 1998: Record of Decision.

RECORD OF DECISION

On August 25, 1998, the EPA Regional Administrator signed a Record of Decision (ROD) selecting the following remedy:

- Low Temperature Thermal Desorption (LTTD) to address the principal threat wastes within the soil and sediment (thus eliminating the source of contamination for surface water);

- Dense Non-Aqueous Phase Liquids (DNAPL) recovery trench system to contain and recover low level threat wastes within the ground water;

- Institutional controls to ensure that future individuals will not be exposed to remaining low level Site contaminants during its containment and recovery; and,

- Ground Water monitoring to ensure the effectiveness of the cleanup remedy.

The ROD specified measurement of achieving cleanup to be based on BAP equivalents (a major creosote PAH constituent). Specifically, it required excavation and LTTD treatment to 3 mg/kg BAP equivalents for contaminated soil up to 2 feet below ground surface and 100 mg/kg BAP equivalents for contaminated soil between 2 to 4 feet below ground surface. The ROD also called for installation of a DNAPL recovery trench system which functions as a containment mechanism for creosote that has leaked into the subsurface soils.

COMMUNITY INVOLVEMENT

Community Relations Plan: August 1997
Open houses and workshops: March 14, 1996; September 10, 1996; February 6, 1997; March 3, 1998; February 11, 1999
Formal Proposed Plan Public Meeting: March 26, 1998
Site Construction Completion Ceremony: July 27, 2000
Citizens on site mailing list: 200

Constituency Interest: Nearby residents concerned about personal health and supportive of EPA efforts.

Site Repository: Madisonville City Hall, 403 St. Francis, Madisonville, Louisiana, 70447, (504) 845-3636

TECHNICAL ASSISTANCE GRANT

Availability Notice: July 1, 1996
Letters of Intent Received: n/a
Final Application Received: n/a
Grant Award: n/a

SITE CONTACTS

United States Environmental Protection Agency

Remedial Project Manager:	Laura Stankosky	214-665-7525
Site Attorney:	Joseph Compton III	214-665-8506
Regional Public Liaison:	Arnold Ondarza	1-800-533-3508
Superfund Region 6 Toll Free Number:		**1-800-533-3508**

Louisiana Department of Environmental Quality

State Contact:	William Perry	225-219-3198

REALIZED CLEANUP BENEFITS

Remediation of the contaminated media greatly reduced the human health and ecological risks and protected drinking water supplies.